



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,585	07/10/2006	Christian Ruetz	3826 1126/US	7664
29894 7590 03/23/2010 DREISS, FUHLENDORF, STEIMLE & BECKER POSTFACH 10 37 62 D-70032 STUTTGART, GERMANY				
EXAMINER WHITTINGTON, KENNETH				
ART UNIT		PAPER NUMBER		
2858				
MAIL DATE		DELIVERY MODE		
03/23/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/585,585

Applicant(s)

RUETZ, CHRISTIAN

Examiner

KENNETH J. WHITTINGTON

Art Unit

2858

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-28 and 30-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 44-46 is/are allowed.
- 6) ☒ Claim(s) 24-28 and 30-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The Amendment and remarks thereto filed February 8, 2010 have been entered and considered.

Allowable Subject Matter

Claims 24-28 and 30-43 are allowed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 44-46 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaiser et al. (US5646523), hereinafter Kaiser.

Regarding claim 44, Kaiser discloses a method for determining an absolute steering wheel angle of a steering wheel cooperating with a steering column (See FIGS. 1a-1b, item C), the method comprising the steps of:

detecting, using a first scanning unit, a rotational angular position of a main rotor, the main rotor being coupled to a steering column or a steering wheel for synchronous rotation therewith, the main rotor disposed for rotation about an axis of rotation of the steering column (See FIGS. 1a-1b, note item 2 and disclosure related thereto);

detecting, using a second scanning unit, a rotational angular position of an additional rotor, the additional rotor disposed for rotation about the axis of rotation of the steering column, the additional rotor being driven by a gear member which, in turn, is driven by the main rotor (See FIGS. 1a-1b, note items 7 and 11 and disclosure related thereto); and

determining the absolute steering wheel angle using output signals of the first and the second scanning units (See FIGS. 1a-1b, note item 13 and disclosure related thereto).

Regarding claim 45, Kaiser discloses the absolute steering wheel angle is within an interval of 0.degree. to 360.degree. (See FIGS. 1a-1b, note rotor 2 is for within one revolution absolute angle determination).

Regarding claim 46, Kaiser discloses the absolute steering wheel angle is a multiple of an interval between 0.degree. and 360.degree (See FIGS. 1a-1b, note combination of within one revolution rotor 2 and multiple rotation rotor 7 allows for 4 revolutions of angle determination).

Response to Arguments

In view of the amendments to claims 24-28 and 30-43, these claims are allowed as noted above.

However, claims 44-46, while making reference to "using the steering angle sensor of claim 24" are interpretable as intended use claims. If the prior art device is capable of meeting the intended use, it reads on the claims. As such, Kaiser still

anticipates these claims. These claims recite an intended use of the apparatus of claim 24 because it is contained in the preamble and the body of the claims does not require any of the recited features of claim 24. Accordingly, these rejections stand.

As a matter of suggestion, if claims 44-46 make reference to particular features of claim 24, then the features of claim 24 will be read into claims 44-46. For example as a matter of suggestion only, amending claim 44 to read as follows would overcome the intended use and overcome the rejection outlined above:

44. A method for determining an absolute steering wheel angle of a steering wheel cooperating with a steering column [using] coupled with the steering angle sensor of claim 24, the method comprising the steps of:

detecting, using [a] the first scanning unit, a rotational angular position of [a] the main rotor, the main rotor being coupled to [a] the steering column [~~or a steering wheel~~] for synchronous rotation therewith, the main rotor disposed for rotation about an axis of rotation of the steering column;

detecting, using [a] the second scanning unit, a rotational angular position of [an] the additional rotor, the additional rotor disposed for rotation about the axis of rotation of the steering column, the additional rotor being driven by [a] the gear member which, in turn, is driven by the main rotor; and

determining the absolute steering wheel angle using output signals of the first and the second scanning units.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **KENNETH J. WHITTINGTON** whose telephone number is (571)272-2264. The examiner can normally be reached on Monday-Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on (571) 272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kenneth J Whittington/
Primary Examiner, Art Unit 2858

kjw